

WHITHER BALLISTIC MISSILE DEFENSE?

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I intend to discuss the prospects for SDI in a changing world situation. My bottom line is that the prospects are good. Recalling the language of my diplomatic years, I would say "I am cautiously optimistic" for at least two reasons; first, because we are in fact dealing with real problems. Second, because of some published statements attributed to President-elect Clinton--although the record is not entirely consistent, and therein lies a problem. Let me first elaborate on my reasons for cautious optimism and then discuss how I am planning our programs for a hand-off to my successor.

Defenses Respond to a Real Need.

First, I would like to talk about why I think that developing and deploying ballistic missile defenses responds to a real problem. The bipolar world model for developing U.S. national security and defense policy is a thing of the past. It is a bit confusing to try to specify what the model is now or should be in the future. There is a lot of debate on this issue, and I anticipate it to go on for months if not years.

At one level it is perhaps a unilateral world model--if you think only in terms of the coordinated unilateral military power of the United States vs. those of other nations--although you have to keep in mind the comments of Senators Nunn and Lugar last week stating there are still thousands of nuclear weapons in the former Soviet Union still aimed at us. Even now President Yelstin is meeting with his legislative body trying to determine what his role in the future will be--so there is some uncertainty as to the course of our former adversary, and it is by no means a sure thing that they will forever be our friend.

At the economic level, we have a trilateral world model--reflecting the sense of competition between three powers--the United States, Europe (Germany), and the East (Japan). And in terms of the regional and transnational involvements that might involve the military forces of the United States in the future, we have a multilateral world model.

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We have to understand the importance of the fact that mass communication ensures almost instantaneous intelligence of unfolding events. This byproduct of open reporting rivals and sometime exceeds the ability of the intelligence community itself. Some years ago when I was negotiating with the former Soviet Union in Geneva, we often had a race between the reports of a gentleman that read European newspapers in four different languages and what we got from the daily intelligent briefings. More often than not we had the information from unclassified sources first. Today it is a bit more confusing because we don't have the single party line voice of an adversary--the former Soviet Union now speaks with many voices. CNN, reporting in Tel Aviv during the Gulf War, made it clear that purely commercial interests can provide timely intelligence to us and our adversaries.

It is very important that technology today is placing enormous power in the many camps--not only information that enables timely decision-making, but also the technology that goes into building very dangerous weapons. The ballistic missile, possibly carrying weapons of mass destruction, can intimidate nations at great distances.

General Chuck Horner noted in the Gulf War that he and other U.S. military planners totally misjudged the military importance of the Scud--thinking it did not have any military utility because it could not hit the broad side of a barn, etc. Nevertheless, in that conflict the Scud was enormously important because of the strain it placed on our logistics requirements to support the missions to counter it. And we can anticipate that others learned the same lessons. So, I believe the ballistic missile will be a weapon of some considerable importance for any number of nations in the future.

This is particularly important if the rest of the world knows that some future Hussein or Kaddafi has the ability to threaten destruction in distant cities. For example, imagine what importance might have been inferred by the world's leaders if Saddam Hussein had demonstrated a ballistic missile launching into space to the middle of the Mediterranean, the South Pacific, or the Atlantic. You can imagine what difficulties we could have had. Even as it was, Patriot's real contribution to the war was providing the Israelis an alternative to retaliation. The objective of Saddam in attacking Israel was to provoke retaliation, draw Israel into the war, break up the coalition, and thereby defeat the United States and its allies at a strategic level. So, the Patriot's importance was strategic, and sometimes the technical argument over Patriot effectiveness has lost sight of the true importance of having a missile defense in the Gulf War. Of course, we are improving greatly. In the future the Patriot will be improved--and we will go beyond Patriot to destroy missile weapons far away from their targets.

In my judgment, there is an urgency to protect the United States. I am particularly concerned that the intelligence community is far too relaxed on this point. Bob Gates' testimony last year indicated that it was unlikely another nation, beyond those who today threaten our shores, would develop a ballistic missile capability against us within ten years. And, in response, the Congress relaxed the sense of urgency of the Missile Defense Act of 1991 by changing the deployment date for the initial U.S. site from the mid-1990's to the year 2002.

I am concerned that this is an optimistic view because I don't think you can ignore the byproduct that space launch capabilities can provide. Since 1957 we have seen additional countries gain space launch capability roughly every four years. So, in a ten year period, we can anticipate at least two additional nations to gain space launch capability. The step between gaining a space launch capability for satellites and being able to deliver nuclear weapons to continental ranges with sufficient accuracy to hold cities at risk is a fairly simple technical achievement. So, I believe more careful study will show that perhaps the Congress should rethink its optimism of last year. While they reinforced the sense of urgency for Theater Missile Defense in a strong bipartisan way, they did back off from their previous sense of urgency for providing a defense for the United States. That bred a bit of a problem for our present plans for the future, but I believe it can be rectified.

In this regard, I think we can't ignore the scenarios by which the nations of the former Soviet Union with existing nuclear weapons decide to seize control of these weapons for themselves. While I don't want to raise undue concerns about the Ukraine, for example, I believe it is plausible that we should worry about that possibility in their case. They are the ones who developed the SS-18s; they have the capability for developing guidance systems, and they may simply decide they wish control in the future, rather than leaving the ICBMs under the control of the Commonwealth of Independent States. They clearly have the wherewithal to do so, and to do it relatively quickly if they choose to do so. I don't want to suggest to you that I am predicting this will happen, because I am not. My concern is that no one can predict the future and that such changes can occur quickly. Again I want to say that Senators Nunn and Lugar have reinforced this concern in their recent briefing to the press following their trip to the former Soviet Union.

Possibilities for SDI Support under Clinton.

The second reason for optimism regarding the future for defenses is that President-elect Clinton in his own statements has suggested as much. I refer to an article in Defense Electronics published in October, before the election, which called first for SDI to develop and deploy Theater Missile Defenses, like Patriot and its successors; second, that SDI focus on the possibility of threats to the United States and be in a position to deploy if the need arises--I believe we need to plan a little more in advance than this article suggested. Also, the article maintained that we should comply with the ABM Treaty and focus on a single U.S. site--but I want to note that Senator Nunn has repeatedly stated that he has talked with President-elect Clinton and that Mr. Clinton supports the Missile Defense Act which calls for negotiations with Russia and the other states of the former Soviet Union to renegotiate the Treaty and permit more than one ground-based site. The third area of Mr. Clinton's program involves prudent research on follow-on technologies to insure that this country maintains technological leadership. This category includes the directed energy systems and also includes the Brilliant Pebbles program.

I certainly do not want to suggest that I am a member of Mr. Clinton's team; I assure you I am not. I would simply suggest to you the issue for the Clinton team with respect to ballistic missile defense is not "whether" but "how much." In this respect, I am worried about a Congressional Budget Office report that was published last August. If you haven't seen it, and you are interested, we can furnish you with copies. It is a report that has worked its way into some of the counsels within the Clinton team early on and apparently was part of the rationale as to why they believed they could cut \$15-20 billion out of the SDI program. Such cuts would basically reduce the program by half. They argued at the same time that they would and reduce the concurrency and risk in our program. This is absolutely an absurd proposition. Those who care about this program need to make sure they get the message through to the Clinton team. If they think they can get a third of their promised \$60 billion overall defense cuts from SDI while maintaining a viable SDI program, they are sadly mistaken.

Planning for Transition.

Let me mention what I am doing, with these previous thoughts in mind, to try to assure a smooth transition. I will be somewhat optimistic and presume we can get the above message through to the Clinton transition team.

Theater Missile Defense Initiative.

We have a solid Theater Missile Defense program at this point. I am ensuring that the Services are on board with their respective portion of the theater defense program, and that there is solid congressional support for all proposed elements of the theater defense program so that we do not, in any way, fray what is clear bipartisan support on Capitol Hill. There is very little controversy regarding Theater Missile Defense. In particular, this means we will have a Patriot/ERINT face-off this fiscal year. The THAAD/GBR contracts were awarded last September; they are proceeding toward deployment of a contingency capability in the 1996 time period. I consider that to be one of our major achievements over the last two years. The idea of deploying prototypical hardware in a concept we call User Operational Evaluation Systems (UOES) was accepted by the Congress because they shared a sense of urgency with the Administration insofar as theater defenses are concerned.

The Navy Theater Missile Defense program hopefully is successfully launched. Certainly, I am doing everything I can to ensure we have a solid Navy Theater Missile Defense program. The Navy is clearly on-board for this initiative, from Admiral Kelso on down. All four committees supported the program last year. I plan to reprogram Space Based Interceptor (SBI) dollars to the Navy Theater Missile Defense program so that roughly 25 percent of the overall Theater Missile Defense budget over the next five to six years will be going to the Navy program.

One of its key attributes is that it is exploiting a rather major \$40-\$45 billion investment in the existing Aegis/Vertical Launch System. It makes good sense to spend 10 percent more to give this existing, versatile Navy system Theater Missile Defense capability.

We have studies underway to look at the possibility of developing boost phase intercept capabilities, a requirement that General Horner believes is very important. Where we are this year in developing this Air Force program is comparable to where we were last year with the Navy program. I would anticipate that if the Clinton team takes this ball and runs with it, next year we will have a solid Air Force Theater Missile Defense component to the overall program, addressing the boost phase intercept problem.

Of course, we are also proactive with the Air Force in the BMC3 area and are making sure that our existing warning and surveillance systems are tied into our Theater Missile Defense work.

This year's appropriation for Theater Missile Defense is about \$1 billion. Over the next two years I am proposing that the Theater Missile Defense budget grow to about \$3 billion per year and that this level of support continue throughout the rest of the decade.

Congress set up a separate Theater Missile Defense Initiative Office last year. I am hopeful that this separate office will still remain under the Director of the SDIO, as was explicitly allowed by the Congress. The reason for keeping SDI and TMDI together has to do with integrating the common technologies across Service lines and bridging the theater and strategic domains. I believe that should be done at the OSD level.

SDI/Limited Defense System.

The SDI program consists of the Limited Defense System (LDS) and Follow-On Technologies. The LDS program is a fragile program. It had a bare majority support on Capitol Hill last year. Over \$1 billion of the \$1.6 billion cut from our SDI budget last year was cut from LDS activities. The removal of the 1996 date from the Missile Defense Act and moving the target date back to the year 2002 reduced the previous sense of urgency; the consequence of that is that we will be recompeting the system engineering and integration contract--we cannot justify sole source extensions without the congressional sense of urgency. That decision will lead to something like an 18-month delay in our previous program, which we presented to Congress in our July 2 report and which the Congress endorsed as low-to-moderate concurrency/risk program as called for by the Missile Defense Act.

So, I'm trying with the overall program to hold to an 18-month schedule slip and retain the acquisition strategy which was approved at the Pentagon and subsequently by the Congress. That's what I'm trying to do and that's what I would pass on to my successor.

I would note that Secretary Cheney indicated in his July 2 transmittal letter that we are executing this program as a top national priority. And I hope that priority will be retained for this LDS program as well as for our Theater Missile Defense development and deployment.

I would like to report a positive status with respect to the development of all of the major elements of the system. The family of radars contract was awarded last September. RFPs were finally provided last week for the ground based interceptor competition--and an April award is anticipated. Hopefully, the Brilliant Eyes contracts will be awarded shortly after completing the JROC validation of the overall system requirements this week--as has been openly reported. And then I anticipate a Commerce Business Daily announcement in the not-too-distant future to initiate the systems engineering and integration competition--and some eighteen months later the entire team will be together--working toward a serious deployment program. This program is delayed by some eighteen months from what was in our plans submitted to Congress last summer. What that means in terms of dates in the core acquisition program, which Congress approved, is that the initial capability of the first site has slipped from late 2002 to mid-2004. And if Congress is persuaded there is a reason for accelerating deployment, a prototypical contingency capability, using the User Operational Effectiveness System concept, could be fielded by late 1999 or 2000, as compared to the 1997 or 1998 dates presented in our July 2 Report to Congress.

For the Limited Defense System budget, my judgment is that something on the order of \$3 billion plus per year is needed over the decade to meet this schedule and field by the year 2004 an effective ground-based system with space-based sensors for cueing.

Keeping a budget of this sort together is going to be a major challenge for the Clinton team in view of what has been approved in the past--certainly they will have to work hard to gain a majority on Capital Hill.

SDI/Follow-On Technologies.

The Follow-on Technologies I am proposing be funded at about a billion dollars per year. This would include about \$350 million for the Brilliant Pebbles program. That is the level that the Senate Armed Services Committee marked at last year and, hopefully, that will pass muster and this program will be "robustly funded," as called for in the Missile Defense Act.

I would note that if you just think about the next five or six years, and add up the Brilliant Pebbles, it comes out to less than \$2 billion--far short of the \$15-20 billion which the campaign rhetoric said that Clinton was going to save by canceling Brilliant Pebbles. So, as I was trying to tell you earlier, the money that they think they are going to save in SDI by cutting space-based interceptors simply isn't there.

The rest of the billion dollars per year for Follow-on Technologies goes into directed energy weapons, other follow-on technology, innovative science and technology, etc.

Overall, this leads to an SDI program that grows from about \$2.7 billion this year, FY1993, to about \$4 billion, or slightly over that, during the latter part of the decade.

Success Depends on Bipartisan Support.

The key to future success in gaining this support is sustaining bipartisan support for SDI, without any question. And we have to understand that the political dynamics have changed. The White House strongly supported SDI during the Reagan-Bush years and held the Republicans as a group together in support of it on Capitol Hill. The majority then was built by a relatively few Democrats at the margin in providing that fairly fragile basis of support. That dynamic is changing.

I hope that the White House will be supportive and will be a leader in supporting the future endeavor. However, the signs have not yet been that positive on this point, and quite frankly, I think that some advocates--and I'll just be blunt here--have put parochial interest ahead of the good of the program and had better rethink their strategy. In the future those Democrats who want to see defenses succeed are going to be in the marketplace trying to persuade other Democrats within the Administration and Republicans on Capital Hill to retain viable support.

I am very concerned about the continuing parochialism that I see. It will not serve the interests of the State of Alabama and far less the interests of the United States for the industry and government team to continue to squabble or fight over what it takes to make things right for the folks back home. We had better think about what is sound technically and what it takes to build bipartisan support.

Having made that acid comment, I would like to close by saying that I see reason for optimism. This discussion has been primarily focused on American business, but part of the reason for my optimism is that our discussions with the Russians, and with our allies, have been going well. The United Kingdom, you might have read the other day, now will itself begin budgeting to spend money on Theater Missile Defenses. Within NATO we are studying in conjunction with AGARD and other groups about the future role of Theater Missile Defenses. This is an entirely different situation from several years ago.

There is every reason to believe that we can develop a sound program with bipartisan support if the Administration wishes--particularly if the White House wishes to lead. What I am trying to do is to manage an effective handoff to my successor to maximize the possibility that this will happen.

Thank you very much.

QUESTIONS AND RESPONSES:

- Q. Aside from the Patriot, what is the shining star from the office of the \$100 and something billion we spent on the program?
- A. First of all, the number is about \$25 billion or so since 1983. Furthermore, the Patriot did its work with very little help from SDI, and I've never claimed credit for that even during the Gulf War.

SDIO began funding for the improvements to Patriot in about the 1989 time period, certainly in 1990-91. Another system that has a direct analogy to Patriot is the Navy's Aegis system--and I'm very pleased to report that we have made a major investment in the Navy's Aegis system. And for a relatively small--on the order of 10 percent of the Navy's sunk costs--investment in that system, I believe we can provide an enormously capable, highly mobile, and effective wide area defense within this decade.

The THAAD/GBR system is a product of SDI entirely. I believe it is possible that we'll have deployable capability in the 1996 time period.

The fact that the technology is ready to be exploited by industry is a result of the \$25 billion investment in sensors, computers, and thrusters. After all, these "gadgets" are now at a size and a cost that we can build cost-effective systems. I believe that we proved--in 1984 I guess it was--that we could hit a bullet with a bullet. The size of the bullet was a Volkswagen, however; and it wasn't very smart.

I would argue that the principal contribution of SDI has been moving the technology to a point where it is exploitable. I think that the acquisition community in the Pentagon is far too conservative in their judgment on how fast we can go and at how much cost. An indication of that is GBR. I was forced to budget far more than the contractors told me was required--I mean those people who actually know what the technology is and which technologies pass muster. I anticipate the same sort of experience with Brilliant Eyes and GBI.

So, the technology is available to make these systems work. The place we catch a lot a grief has to do with the directed energy programs. A lot of money was invested there. We had to cancel a lot of programs mid-stream and in so doing make our choices about priorities. The choices I made were always in the direction of trying to build a defensive capability as soon as possible.

So, for example, we canceled--I forget the name of the program--an advanced tracking program, after spending \$400 million to \$500 million, and planned shuttle launches. Starlab was to go a year or so from now after more significant investments.

Our major issue now, after years of Congressional budget cuts in our directed energy programs, is how to spend a limited amount of money on directed energy. In fact, our annual budget this year is less than it was in 1971. So, we have made enormous investments in directed energy programs, and that technology has moved along and is closer to a deployment stage than many people appreciate. But when you only have so many dollars, you have to cut things--you have to make tough choices. Unfortunately, that is not a pretty sight. It doesn't allow you to put things on the shelf in an orderly way. People want to criticize us for coming up short--but we had little choice.

But, as for the kinetic energy systems, sensors, communications, computers, etc., I think we are reaping the fruit of sound investments.

Q. What about the future of Boost Phase Intercept programs? Will there be support for such initiatives?

A. There will be. One of the things I did this year was to recommend transferring almost a half a billion dollars to the Air Force to support an advanced technology line for the boost phase intercept mission area. Initially, the Air Force is interested in pursuing an airborne laser concept for this, but my understanding with Secretary Don Rice is that, for whatever reason--propagation experiments don't work out over the years or the user decides it's not cost-effective to look for an airborne laser, those dollars will be used in any case for the boost phase intercept technology program and mission area.

We at SDIO are complementing this work with our own funding and with programs conducted jointly with the Air Force. The Israelis are looking at a piloted vehicle that can launch hit-to-kill interceptors in a missile launch area. Other concepts are also being examined. There is a major architectural review going on by our Theater Missile Defense Office right now. They will come back with a recommendation on programs to pursue.

General Chuck Horner has been very supportive of this mission area. While he is supportive of trying to find Scuds on the ground to destroy them with counterforce capabilities, he is skeptical of relying on that approach. He is strongly supportive of active defense systems, in general, and destroying the missiles as far away as possible, preferably over the territory of the launching party. Take that common sense attitude and add the concern about countermeasures with clustered sub-munitions dispersed in late boost phase, and in the future we simply must have an active boost phase defense capability. Congress was less supportive of this mission this year than I would want them to be. We had a squabble over whether or not they could continue to support RAPTOR, which is an unmanned air vehicle program to launch boost phase interceptors. They finally relented to let us plan this year and will be looking at specifics next year.

That status is better, however, than was our status last year with the Navy program--when Congress held up funds until August, I believe. But, by October we had all the Committees on board and they raised the President's \$19 million budget request to at least \$90 million.

As I said, I believe we're further ahead with Air Force Theater Missile Defense this year than we were with Navy Theater Missile Defense last year. If the Air Force and SDIO can get their act together, I believe we will have a viable boost phase interceptor program.

-- End --